

## PARTMENT OF COMMERCE UNITED STATES **Patent and Trademark Office**

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ATTORNEY DOCKET NO. FIRST NAMED INVENTOR **FILING DATE** TON NO. R LAR-15348-2 HELLBAUM 01/24/97 08/797.553 **EXAMINER** Г MM42/1025 BUDD, M NASA LANGLEY RESEARCH CENTER PAPER NUMBER **ART UNIT** MAIL STOP 212 3 LANGLEY BOULEVARD 2834 HAMPTON VA 23681-0001 DATE MAILED: 10/25/99

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

	Application No. Applicant(s)
	08/797553 Hellbaum et al
Office Action Summary	Examiner Group Art Unit
	M. Budd 2834
—The MAILING DATE of this communication appears	on the cover sheet beneath the correspondence address—
Period for Reply	3
OF THIS COMMUNICATION.	EXPIRE 3 MONTH(S) FROM THE MAILING DATE
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.13 from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply</li> <li>If NO period for reply is specified above, such period shall, by default, ex</li> <li>Failure to reply within the set or extended period for reply will, by statute,</li> </ul>	pire SIX (6) MONTHS from the mailing date of this confindincation.
Status	
Responsive to communication(s) filed on $9-15-9$	
☐ This action is FINAL.	
☐ Since this application is in condition for allowance except fo accordance with the practice under Ex parte Quayle, 1935	r formal matters, <b>prosecution as to the merits is closed</b> in C.D. 1 1; 453 O.G. 213.
Disposition of Claims	
Claim(s) 9- 24	is/are pending in the application.
	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
□ Claim(s) 9- 24	is/are rejected.
☐ Claim(s)	is/are objected to.
□ Claim(s)	are subject to restriction or election requirement.
Application Papers	·
$\hfill \square$ See the attached Notice of Draftsperson's Patent Drawing	Review, PTO-948.
☐ The proposed drawing correction, filed on	• •
☐ The drawing(s) filed on is/are objecte	d to by the Examiner.
☐ The specification is objected to by the Examiner.	
$\square$ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119 (a)-(d)	
<ul> <li>□ Acknowledgment is made of a claim for foreign priority und</li> <li>□ All □ Some* □ None of the CERTIFIED copies of the</li> </ul>	
received.	
<ul> <li>received in Application No. (Series Code/Serial Number</li> <li>received in this national stage application from the Inter</li> </ul>	national Bureau (PCT Rule 1 7.2(a)).
*Certified copies not received:	
Attachment(s)	
☐ Information Disclosure Statement(s), PTO-1449, Paper No	(s) Interview Summary, PTO-413
□ Notice of Reference(s) Cited, PTO-892	☐ Notice of Informal Patent Application, PTO-15
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	☐ Other
	Action Summary
	residi dell'ileri

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No.

Application/Control Number: 08/797,553

Art Unit: 2834

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 9, 14 and 15 are rejected under 35 U.S.C. 102(a) as being cleary anticipated by Corwin or Haertling.

Claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Corwin.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corwin or Haertling. Corwin and Haertling teach the electroactive device except for some specific materials. Since it has long been held that selection from among known materials kis within the skill expected of the routineer, it would have been obvious to one of ordinary skill in the art to select appropriate materials for Haertling or Corwin.

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Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haertling in

view of Corwin. Haertling teaches an electroactive device except the prestress layer is an

integral part of the piezoelectric material rather than a separate, bonded layer. It has long been

held that making parts integral or separable is within the skill expected of the routineer. Further,

Corwin clearly teaches providing a separate prestress layer on the piezo element. Thus, it would

have been obvious to one of ordinary skill in the art that Haerthing could be made from plural,

bonded layers. Conversely, it would have been obvious to one of ordinary skill in the art that the

prestress of Corwin could have been placed on the concave side of the piezo material as taught

by Haertling.

Budd/dc

October 6, 1999